

## 7.2 ACTIVE DENIAL SYSTEMS

<b>Key Technical Features</b>	<p>Active denial systems are a type of directed-energy weapon, designed to heat the skin with a focused beam of millimetre wave energy.</p> <p>This weapons technology is currently under development, although vehicle-mounted models as well as models for indoor use have both been marketed.</p>
<b>Human Rights Concerns</b>	<p>A directed energy beam is silent and invisible, making avoidance of the weapon difficult or impossible, which could stop people from dispersing safely, and could lead to panic-driven stampedes.</p> <p>A long exposure to directed energy, especially one at higher power, could potentially lead to third-degree burns and potentially life-threatening injuries.</p> <p>The energy beam can be widened, which can result in dangerous full body exposure, the targeting of more than one person at a time, or the targeting of a crowd indiscriminately. This risk is particularly the case for larger models.</p>
<b>Statements and Standards from Human Rights Bodies</b>	<p>OHCHR: "The use of [directed-energy weapons liable to cause serious injury] is widely considered to violate international human rights law. They should not be used in law enforcement."<sup>122</sup></p>
<b>Examples of Existing Controls</b>	<p>These weapons are not widely used and to the best of Omega's knowledge, there are no trade controls on this specific type of weapon.</p>
<b>Proposed Control</b>	<p>Independent and transparent medical and human rights-compliance testing is required before decision to manufacture, purchase, or use.</p>

<sup>122</sup> OHCHR, *UN human rights guidance on less-lethal weapons in law enforcement*, 2020, para 5.1.



▲ Active denial system